In the Claims:

The following is a complete list of the claims pending in the application:

1-34 (Canceled)

35. (Original)In an emissions monitoring system, a method of determining bias in a measurement of a constituent concentration level in a sample gas, the method comprising:

establishing a sample gas flow from an emission stream into a sample gas line;

removing water from the sample gas flow and cooling the sample gas flow to a temperature below about 41 °F to produce a cooled, dried sample gas flow;

determining the constituent concentration level for the cooled, dried sample gas flow;

introducing a span gas having a known span gas constituent concentration level into the sample gas flow to form a combined sample and span gas flow, the span gas being introduced at a desired span gas flow rate;

removing water from the combined sample and span gas and cooling the combined sample and span gas to a temperature below about 41 °F to produce a cooled, dried, combined sample and span gas flow;

determining a combined sample and span gas constituent concentration level for the cooled, dried, combined sample and span gas flow; and

determining a measurement bias using the known span gas constituent concentration level, the sample gas constituent concentration level and the combined sample and span gas constituent concentration level.

36. (Original)A method according to claim 35 further comprising the steps of:

measuring a sample flow rate of the cooled, dried sample gas flow; and

measuring a combined gas flow rate of the cooled, dried, combined sample and span gas flow.

37. (Original)A method according to claim 36 further comprising the steps of:

determining a concentration level of a secondary constituent in the cooled, dried sample gas;

correcting the sample flow rate using the secondary constituent concentration level in the cooled, dried sample gas flow;

determining a concentration level of the secondary constituent in the combined, cooled, dried span and sample gas flow; and

correcting the combined gas flow rate using the secondary constituent concentration level in the combined cooled, dried sample and span gas flow.

38. (Original)A method according to claim 37 wherein the secondary constituent is one or more of water, O_2 and CO_2.

39. (Original)A method according to claim 35 further comprising the step of:

calculating the desired span gas flow rate using a desired combined sample and span gas constituent concentration level, the sample gas flow rate and the span gas constituent concentration level.

40. (Original)A method according to claim 39 wherein the desired combined sample and span gas constituent concentration level is calculated using a predetermined ratio of span gas constituent concentration level to combined sample and span gas constituent concentration level.

41.-53. (Canceled)